



Wild Blueberry Commission OF MAINE

5715 Coburn Hall, Orono, Maine 04469-5715

TEL: 207-581-1475
FAX: 207-581-3499

August 28, 2003

U.S. Department of Agriculture
Import Policies and Programs Division/FAS
1400 Independence Ave., S.W.
Stop 1021
Washington, DC 20250-1021

To whom it may concern:

The Wild Blueberry Commission of Maine is filing the enclosed petition for Trade Adjustment Assistance on behalf of Maine's estimated 560 Wild Blueberry growers. Maine is the largest producer of blueberries, wild or cultivated in the United States and is the only state with a commercial Wild (lowbush) Blueberry growing and processing industry.

We believe that Maine growers qualify for the assistance based on the field price paid to growers for their Wild Blueberries sold for processing. ~~About 99% of the Maine Wild Blueberry crop is frozen.~~ The price paid to growers is directly related to the market conditions for frozen Wild Blueberries. During the last few years there has been a surge of frozen Canadian Wild Blueberries sold in the United States due to large Wild Blueberry crops in certain sectors of Canada's Wild Blueberry industry and related market conditions.

If there are any questions regarding the enclosed petition, do not hesitate to contact me directly. On behalf of Maine's Wild Blueberry growers, thank you for acting on this petition.

Sincerely,

David K. Bell
Executive Director

CC: Roy Allen, Chairperson, Wild Blueberry Commission

Enclosures

- Trade Adjustment Petition
- Wild Blueberry Culture in Maine

FAS-930
(Proposal 4)

U.S. DEPARTMENT OF AGRICULTURE
Foreign Agricultural Service

Form Approved - OMB No. 0551-00XX

TRADE ADJUSTMENT ASSISTANCE (TAA) FOR FARMERS
PETITION FOR CERTIFICATION AND ELIGIBILITY FOR A GROUP OF PRODUCERS

NOTE: The following statement is made in accordance with the Privacy Act of 1974 (5 USC 552a) and the Paperwork Reduction Act of 1995, as amended. The authority for requesting the following information is the Trade Adjustment Assistance for Farmers, (Pub. L. 107-210). The information will be used to determine program eligibility. Furnishing the requested information is voluntary. Failure to furnish the requested information will result in denial of program benefits. This information may be provided to other agencies.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0551-00XX. The time required to complete this information collection is estimated to average 6 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. **RETURN THIS COMPLETED FORM TO THE ADDRESS LISTED BELOW.**

Please complete all requested information in this form and return it to the following address.

U.S. Department of Agriculture
Import Policies and Programs Division/FAS
1400 Independence Ave., S.W.
Stop 1021
Washington, DC 20250-1021

If you need assistance, telephone 202-720-2926 or e-mail your questions to (special e-mail account to be created).

1. Name of Authorized Representative or Primary Contact David K. Bell, Executive Director	2. Name and Business Address (Including City, State, and Zip Code) Wild Blueberry Commission of Maine 5715 Coburn Hall Orono, Maine 04469-5715
3. Telephone Number (Including Area Code) 207-581-1475	5. E-Mail Address dkbell@maine.edu
4. Fax Number (Including Area Code) 207-581-3499	

6. This petition is made on behalf of the following producers: (Use separate sheet for additional producers)

A. Name of Producers	B. Mailing Address	C. Telephone No. (Including Area Code)	D. E-Mail Address
See Boxes 1&2			

7. COMMODITY INFORMATION:

A. Description of the raw (excludes processed) agricultural commodity: (e.g., fresh raspberries) Frozen wild blueberries	B. Commodity's Harmonized Tariff Schedule (HTS) number (HTS can be found at: http://www.fas.usda.gov/ustrade/) 0811.90.2024
C. This petition is for the most recent marketing year for the commodity beginning in <u>July 2002</u> and ending <u>June 2003</u> (month/year) (month/year)	
D. Check whether the certification is to cover a commodity produced nationally or in an "impacted" area (state or states): <input type="checkbox"/> National <input checked="" type="checkbox"/> State(s) (list): <u>Maine</u>	

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8. If Item 7D "National" is checked, provide the national average annual price for the most recent marketing year and the 5 preceding marketing years. If Item 7D "State(s)" is checked to indicate that the petition is for an impacted area, provide the relevant average price for the most recent marketing year and the 5 preceding years, and specify the months being averaged if the price is for less than 12 months (seasonal price).

(NOTE: National price data is available for many raw agricultural commodities from the Department's National Agricultural Statistical Service (NASS) at: www.usda.gov/nass.)

A. Marketing Years	B. Average Annual Price				
Most recent	\$ 0.28 per pound				
Provide prices for the 5 years prior to the most recent marketing years. Beginning with the most recent.	1 Year ago:	2 Years ago:	3 Years ago:	4 Years ago:	5 Years ago:
	\$0.30	\$0.40	\$0.51	\$ 0.46	\$0.43

33.6 = 80%

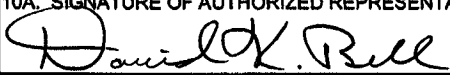
0.42

9. Basis for request for adjustment assistance. Please explain or attach any documents, which show how increased imports have affected the national price of your product during the most recent marketing year. In your description include any other factors which may also have contributed to lower producer prices.

See Attachment

$$\begin{array}{r} 33.6 \\ - 28.0 \\ \hline 5.6 \end{array} \div 2 = 2.8 \phi$$

30.4
40.4
51.4
46.4
43.4
=
210.4
210.4
5.4
Ave | 42.4
42.4
0.8=
80% 5-yr. Ave 33.6*

10A. SIGNATURE OF AUTHORIZED REPRESENTATIVE OR PRIMARY CONTACT 	10B. TITLE Ex. Director	10C. DATE SIGNED 8/24/03
11A. SIGNATURE OF FAS REPRESENTATIVE	11B. TITLE	11C. DATE

Answer to Question 9. Basis for request for adjustment assistance.

Imports of frozen wild blueberries from Canada have been a significant cause of injury to the wild blueberry growers of Maine during the past 5-year period. Imports increased from 17,648,000 pounds in crop year 1998 to 40,510,000 pounds in crop year 2002, or by 130 percent. The pricing data show that as imports from Canada increased, the wild blueberry growers experienced an unprecedented decline in U.S. prices for blueberries from processing. U.S. prices dropped from \$0.46 per pound in crop year 1998 to \$0.28 per pound in crop year 2002, or by 39 percent. See July 2003, USDA, National Agriculture Statistics Service Attachment. U.S. prices in crop year 2002 were 67 percent lower than they were for the average prices in the preceding 5 marketing years. Imports from Canada have increasingly displaced domestic product as users have purchased the imported frozen product at low and declining prices. In a commodity market characterized by intense price-competition, the degree of underselling coupled with the increasing volume of imports indicates that these imports have played a substantial role in the price declines in the wild blueberry market.

Maine produces virtually all of the commercially harvested wild blueberries in the United States. Virtually all of the wild blueberry crop is sold to processors in raw form that in turn freeze the berries for sale to the trades for use in food and beverage products. The increase of low-priced imports of frozen wild blueberries from Canada has forced processors to substantially lower their prices of frozen wild blueberries to compete for the trades business. This declining trend of U.S. prices of frozen wild blueberries at the processor level has had a seriously negative impact on prices farmers have received because virtually all of wild blueberries grown in Maine are ultimately processed and sold as frozen.

Pursuant to 7 CFR 1580.202, the Wild Blueberry Commission of Maine requests a hearing to explain and justify why frozen wild blueberries should be considered "like or directly competitive" with blueberries for processing.

**NASS**

22 Bridge St. Third Floor
PO Box 1444
Concord, NH 03302

New England Agricultural Statistics Service

a field office of the National Agricultural Statistics Service
United States Department of Agriculture

Aubrey R. Davis, Director
www.usda.gov/nass

603-224-9639
Fax: 603-225-1434
nass-nh@nass.usda.gov



Maine Wild Blueberries

July 2003

July 30, 2003

A special "THANK YOU" goes to approximately 400 Maine Wild Blueberry growers and processors who have helped us by completing the wild blueberry survey during July.

AVERAGE CROP EXPECTED

Maine's 2003 wild (lowbush) blueberry crop is expected to total 80.0 million pounds, based on grower reported condition of the crop through mid-July. This forecasted production would be an increase of 28 percent from last year's output of 62.4 million pounds, and is six percent above 2001 final production.

Many growers reported that crop prospects are close to average this year although many expressed concern about a lack of moisture. Sufficient rain from mid-July until harvest would ensure an average or better crop.

Most growers detected minimal winter kill on the 2003 wild blueberry crop due to adequate snow cover throughout the winter. Weather was cool and rainy during the spring of 2003, causing poor, spotty pollination in many areas. Mummy berry disease is prevalent for the second consecutive year. Weeds and fruit flies, among other pests, are also bothersome this season.

Showers near the end of July improved crop quality as growers prepared for harvest.

WILD BLUEBERRIES: Production and Value, 1993 - 2003

STATE & YEAR	Total Production	All Price per Pound ^{1/}	Total Value of Production	Fresh Blueberries ^{2/}			Blueberries for Processing		
				Production	Price per Pound	Value of Production	Production	Price per Pound	Value of Production
	1,000 Pounds	Cents	1,000 Dollars	1,000 Pounds	Dollars	1,000 Dollars	1,000 Pounds	Cents	1,000 Dollars
Maine									
1993	64,562	28	17,979	350	--	--	64,212	28	17,979
1994	59,495	30	17,744	350	--	--	59,145	30	17,744
1995	65,944	32	21,004	305	--	--	65,639	32	21,004
1996	59,198	57	33,590	268	--	--	58,930	57	33,590
1997	73,816	43	31,622	276	--	--	73,540	43	31,622
1998	62,981	46	29,166	360	1.00	360	62,621	46	28,806
1999	66,102	51	33,889	300	1.10	330	65,802	51	33,559
2000	110,990	40	44,732	420	1.20	504	110,570	40	44,228
2001	75,200	31	22,945	350	1.40	490	74,850	30	22,455
2002	62,400	29	17,860	400	1.25	500	62,000	28	17,360
2003 ^{3/}	80,000	--	--	--	--	--	--	--	--

^{1/} All Price per Pound and Total Value of Production for 1993 - 1997 do not include fresh market blueberries.

^{2/} Fresh Blueberry Price per Pound and Value of Production are not available before 1998.

^{3/} Current year production forecast is based on growers' assessments as of mid-July.

BLUEBERRY COMMENTS 2003 BY COUNTY, AS REPORTED ON THE GROWER SURVEY

CUMBERLAND, KENNEBEC, OXFORD: Drought, two years - no crop. Wet, cold spring. Late May - frost. Increases in real estate taxes are greater than return from crop. Wild turkeys are a major problem - they have stripped blueberries for the 2nd year in a row. Cold and rainy pollination weather. Good moisture. Intrusive red bunch berries. Hope for an average crop. No winter damage. Average size berries. Bad pollination weather. Average bloom and set. Drought from last year hurt places on this year's crop near ledges and high places. Wet weather this spring may cause insect problems. Need more rain to prevent drought. Not much winter damage - enough snow. Very cold and rainy during pollination - bees could not work well. Minor winter damage. Not enough pollination. I expect an average to light crop. Very little winter kill, crop should be above average if we get some rain. Looks like a small crop. Hot and dry last summer did not make many fruit buds. Cool, wet pollination weather. Some blossom blight. **HANCOCK:** The set was light and it has been dry, but with showers in the past few days, things may turn out okay. No disease or insect problems. Short growth from last year's drought. No winter damage. Good pollination despite cold, wet weather. Need rain from now until harvest. Rainy, damp, foggy during pollination. Too dry. Winter damage above normal. No noticeable insect problems out of the ordinary. Things don't look good. Disease - spotty, no good pollination. Long, cold winter, good snow cover. Very wet, cold spring. Fair blossom set. Weather not good for

bees to work. Blossom blight because of a very wet spring, lack of rain - I expect a less than average. Poor spring. Roughly 25 percent of the acreage suffered winter damage. So far, good quality berries and good moisture. Some blossom blight and mummy berry present. General prospects appear to be below average. Good pollination despite cool spring. Poor pollination, good winter cover. The prospects for a good year are very poor due to all the Canadian berries coming into this country. Blueberries are diseased and are doing poor this year. Lots of blight of all sorts. Much winter damage. Need rain. Dry last year and not much rain in June. Snow cover from December until mid-April. Very little winter damage - most damage done by kids on dirt bikes and 4-wheelers. Too much rain during blossoming - bees stayed in the hive. Smaller crop expected because of wet spring. It has been dry - we need rain to plump up the berries. Too wet in the spring, too dry now. Drought for two years, need rain this year. Will have a light crop. Cold spring. Due to lack of moisture this and previous two seasons and also winter damage, there aren't enough berries to make it feasible to harvest. The last two weeks of no rain dried berries out. Spring frost hurt and so did the wet conditions. Only 1/3 ripe as of 7/20/03, good moisture and little disease. Fields look good but we need rain. A wet, cool spring contributed to a late bloom with moderate blight and possible pollination problems. Some clones are heavy set and others are very light. With this hot, dry spell we are having now, rainfall will be critical.



Wild Blueberry

FACT SHEET



Wild Blueberry Culture in Maine

Fact Sheet No. 220 (Bulletin No. 2088)
Revised 1998

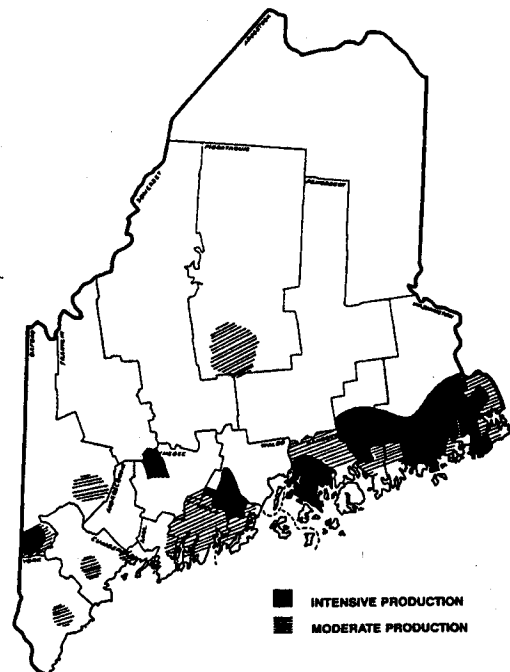
Introduction

The wild blueberry is one of four fruit crops native to North America. Blueberry growth was first encouraged by Native Americans by periodically burning over fields. In the early 1800's, the European settlers gathered berries as a public privilege on the blueberry barrens of Washington County. Blueberries were canned and shipped to the Union troops during the Civil War in the 1860's. After the war, public access was limited and production was improved by more frequent pruning. Management intensity and production has increased over the years.

Maine is the largest producer of wild blueberries in the world. Maine production has exceeded the cultivated blueberry production in Michigan. Maine produces 25 percent of all blueberries in North America, including wild and cultivated production. Twenty five percent of the total crop is produced in the Canadian provinces of Nova Scotia, Québec, New Brunswick, Prince Edward Island and Newfoundland. The remaining 50 percent of the crop are cultivated blueberries produced in Michigan, New Jersey, British Columbia, Washington, Oregon, Georgia, Arkansas and others.

Wild blueberries are grown on 60,000 acres in Maine. These fields have been developed from native plants that occur naturally in the understory of the forest. Because of the pruning practices employed, only half of the acres are available to be harvested every year. Seven companies operate processing plants that freeze and can berries, and there is one fresh pack cooperative. Currently, 99 percent of the crop is frozen, but five to ten percent of those berries are canned after the harvest is complete. Less than one percent of the wild blueberry crop is sold fresh.

MAINE DISTRIBUTION
OF BLUEBERRY PRODUCTION



Botanical Classification

All blueberries and cranberries are in the Ericaceae plant family or Heath family. There are several species of wild blueberries found in Maine. Blueberries and cranberries are in the genus *Vaccinium*. The most abundant wild blueberry in Maine is known as the low sweet blueberry and has the species name *angustifolium*. It has smooth stems that vary in color from tan to red, and plants vary in height from four to 15 inches. Leaves of *angustifolium* are dark green, smooth and sometimes have slightly toothed edges. Blossoms are bell-shaped and usually white or

pinkish-white. The fruit is usually dark blue, but it is colored with a waxy coating or bloom that gives the fruit a light, powder blue appearance. A black-fruited variety of the low sweet blueberry, *nigrum*, is also commonly found in wild blueberry fields. It has the same characteristics as low sweet, except that the fruit is black without a waxy coating. Also, the berry size tends to be larger and the fruit sweeter than the low sweet blueberry.

The next common variety is the sour top blueberry, *Vaccinium myrtilloides*. This species tends to be more prevalent in mountains or hilly areas. Stems and leaves are covered with tiny hairs and are more branched than are those of the low sweet. Sour top stems grow six to 24 inches tall. Leaves are light green, hairy on the underside and tend to curl down on the edges, earning its other name, velvet leaf blueberry. Blossoms are bell-shaped and greenish-white, but sometimes tinged with red. Berries are usually smaller and less sweet than the low sweet. They are bright blue and covered with a waxy coating.

Wild plants of the highbush blueberry, *Vaccinium corymbosum*, are also found along lakes or ponds adjacent to managed wild blueberry fields and occasionally will cross with the lowbush plants to produce a hybrid that has characteristics of each plant. The cultivated varieties of the highbush blueberry are grown in home gardens and in small plantings but are not part of the commercial wild blueberry industry in Maine.

Growth Habits of the Wild Blueberry

Wild blueberry plants occur naturally in the understory of the forest in Maine. Blueberry plants are initially established from seed. These plants send out underground stems called rhizomes. These rhizomes grow near the soil surface, periodically sending up new stems above the soil surface. Roots develop on the rhizomes as they grow. The original plant, with its spreading rhizome system, is referred to as a clone. Each clone is genetically different from neighboring plants. Clones will vary in size, but the area they cover is related to their age; the younger clones cover less area. An average clone will cover

from 75 to 250 square feet. An acre of wild blueberries may contain 200 to 500 clones. Fields having dense stands of productive clones will yield 6,000 pounds per acre, but more intensive management could potentially double that production.

New plants may be propagated from seed, soft-wood cuttings, rhizome cuttings, by digging up sod pieces or by tissue culture. Cuttings or sods of plants are slower to establish and spread than seedlings or tissue culture plants. Surface mulches of bark or peat encourage rhizome growth and subsequent plant spread.

Most wild blueberry fields are pruned to the ground every other year. In the growing season immediately following the pruning, the vegetative and formative growth takes place. Flower buds are formed during this season. In May of the following year, or the crop year, the flower buds open and come into bloom. This bloom period lasts from two to four weeks. Blueberries require cross pollination for a successful fruit set. After pollination and fruit set, the blueberries develop and ripen in late July and August.



Wild Blueberry Plant

Cultural Practices

Pruning

Until recently, most commercial blueberry fields have been pruned by fire with straw or oil burners. Repeatedly burning fields for a number of years has resulted in a decline in production associated with the destruction of the organic pad and exposure of the rhizomes. Mechanical mowing will produce equivalent yields without depleting the organic pad. Mowing is less costly than using oil or straw and has been widely adopted by blueberry growers. Burning does reduce certain insects and diseases that reside in the leaf litter. Favorable weather conditions could lead to periodic outbreaks of these pests in mowed fields, which would require periodic burning to reduce populations.

Pollination

Blueberries require insect pollination, and the use of honeybees will increase the fruit set and seed number resulting in higher yields. Current recommendations are for two to four hives per acre depending on the field size and location.

Fertilization

Fertilization recommendations used to be based on noting stem height and leaf spotting and applying nitrogen from urea. Growers now use leaf tissue samples to determine if fertilizer is needed since standards of satisfactory levels of nutrients in leaf tissue have been developed. Blueberries have responded well to fertilization, resulting in more rapid establishment, greater plant growth and higher yields.

Soil Acidity

The optimum acidity level, or pH, for wild blueberry soils is 4.5. The acidity of these soils should be kept near this optimal level. Soil testing will identify if treatment with sulfur (to lower pH level and increase soil acidity), or lime (to increase the pH level and lower soil acidity) is needed.

Irrigation

Irrigation will result in an increase in the number and weight of berries, if moisture is limiting. Irrigation provided in the nonbearing year increases bud formation, which could increase yield in the crop

year. Currently, irrigation is used commercially by a few growers during the crop year, but irrigating nonbearing fields is being further evaluated.

Propagation

Plants for establishing new blueberry fields have been produced from softwood cuttings of select clones and from seed obtained by pollinating flowers of an outstanding clone with pollen from an equally good clone. Micropropagation techniques have been developed for the wild blueberry. Plants are now commercially available. Tissue culture propagated plants exhibit the spreading growth habit of seedlings along with the uniform productivity characteristics of rooted cuttings. Mulching has been extremely beneficial for increasing survival of planted wild blueberries and encouraging their lateral spread through rhizome growth. Using high yielding clones to fill in existing fields will make the current management practices more efficient and result in higher yields at a lower cost per pound.

Pest Management

Insects

A system of monitoring the blueberry maggot and an action threshold has been developed by University of Maine researchers, resulting in a decrease in frequency of sprays and an increase in spray efficacy. Periodic outbreaks of spanworm, flea beetle and thrips still cause sporadic damage, so continued monitoring of the fields for these pests is important.

Diseases

The major blueberry diseases include mummy berry and blossom blight. Wet weather during bloom provides the necessary conditions for infection and spread of these diseases. Mowed fields may have a higher incidence of mummyberry than burned fields, so increased use of fungicides may be necessary if mowing continues to be the preferred pruning practice.

Weeds

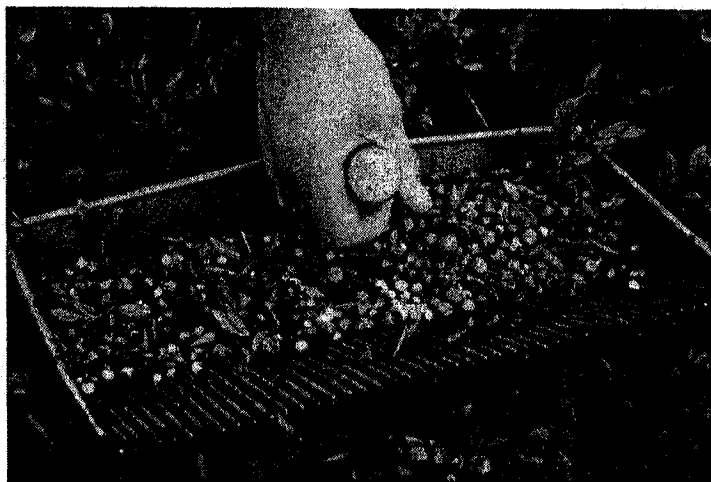
Suppression of competing weeds with preemergence herbicides and the use of postemergence herbicides for grasses and in wiper applicators has resulted in increased yields and allowed for more efficient use of mechanical harvesters.

Integrated Crop Management

This program stresses the scouting of fields to identify the pest and determine when it will reach economically damaging levels. Pesticide effectiveness may be increased while decreasing the overall costs to the grower. Fertility management is also included so that only the amount of fertilizer needed will be applied. This management concept insures that only the pesticides and fertilizers that are needed are applied, resulting in an economically and environmentally sound management program.

Harvesting

Lowbush blueberries are harvested in one picking operation. They are harvested by hand raking, using a metal rake or by mechanical harvesters. Harvest begins in late July or early August, when most of the berries are ripe. The raking season normally lasts up to Labor Day. Mechanical harvesters have increased in use because of improvements in harvesters and field conditions but still are used on less than ten percent of the fields in Maine.



Wild Blueberry Rake

Marketing

The Wild Blueberry Association of North America is an association formed in 1981 in both the United States and Canada with a mission to promote wild blueberry products. Through the efforts of this organization, sales of blueberries have increased with the larger crops, and the price has remained strong with the increased competition. Planting and production of the cultivated blueberry has increased the total blueberry crop in the United States. Both research and marketing efforts and continued cooperation between the United States and Canada will be needed to successfully compete in the future.

Future Trends

Increased yields will come from more intensive management by blueberry producers: interplanting, mulching, increased pest management, fertility, irrigation and pollination. Increased production will require more promotional efforts to keep product demand ahead of supply. Researchers at the University of Maine will continue to investigate more efficient ways to produce, process and market wild blueberries. With all of these forces working together, a healthy future is in store for the wild blueberry industry.

Prepared by: David E. Yarborough, Extension blueberry specialist, University of Maine, Orono.

Revised March 1998

Published and distributed in furtherance of Acts of Congress of May 8 and June 30, 1914, by the University of Maine Cooperative Extension, the Land Grant University of the state of Maine and the U.S. Department of Agriculture cooperating. Cooperative Extension provides equal opportunities in programs and employment.